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IS NAVAL WARFARE UNIQUE?

by

JAMES JOHN TRITTEN

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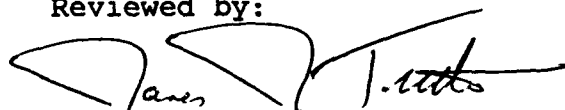
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# IS NAVAL WARFARE UNIQUE?

by

James John Tritten

## I

Attempts to theorize about the nature of warfare or to describe basic principles of military science or strategy often pay only limited attention to naval warfare. Despite the fact that significant numbers of strategic nuclear weapons are found at sea, most discussions of deterrence theory and arms control have been devoid of special considerations due to their location at sea; i.e., attrition during the conventional phase of a war. When military operations specialists create simulations and games for naval warfare, they often relegate combat at sea to a special adjunct category outside the mainstream of models.

This stems in part to years of preparing only for the "short" war; one which might be over in a matter of days or a few weeks, or before navies could affect the outcome through their role in resupply and reinforcement. For years, the political and military leaders of many nations took the "revolution in military affairs" to mean that nuclear weaponry made obsolete any war whose outcome depended upon the sealines of communication or naval actions at sea. A standard joke amongst some Sovietologists and land-oriented military strategists has the marshals, when they reach the Atlantic in a future war, asking each other, "by the way, who won the war at sea?"

Maritime specialists could also be accused of concentrating on operations at sea to the detriment of appreciating how armed conflict at sea affects the overall war and its components ashore. "Where is, repeat, where is Task Force 34? The world wonders" asked the padding at the end of Admiral Nimitz' message<sup>1</sup> to Admiral Halsey during the Battle for Leyte Gulf. This battle typifies the potential disconnect between naval commanders biased towards decisive battles and an overall commander-in-chief seeking wider strategic objectives.

Despite the debates over the U.S. Navy Maritime Strategy, there sometimes lingers a perception amongst some politicians and academics (occasionally reinforced by naval personnel) that maritime spokesmen often act as though navies can win the war alone.<sup>2</sup> Despite the lack of anything called Soviet naval strategy in the lexicon of Soviet military science, we in the West often write articles, books, and intelligence reports about their single service strategic perspective for a nation where such a cultural bias cannot exist.<sup>3</sup> In short, the Soviets have concluded that naval warfare is not unique and do not use the term naval strategy.

The term "unique" is used deliberately, to test the most demanding claims made in the past.<sup>4</sup> Although "unique" was selected, the reader may choose to substitute "different" throughout if he rejects the concept that any form of warfare is "unique." This paper also discusses each form of warfare without consideration of cross medium warfare. Although one can argue that land warfare is now in reality air-land warfare, this paper

will primarily contrast sea warfare with combat ashore.

Debates over the uniqueness of naval warfare are not limited to those in the American literature. One can posit that the whole series of articles, monographs, and books signed out by the late Fleet Admiral of the Soviet Union Sergei Gorshkov were designed to educate land-oriented marshals about the importance of naval warfare. Even recent articles in the Soviet literature attempt to reconcile the need to pay homage to a single combined arms military strategy with the peculiarities of operating at sea.<sup>5</sup>

If naval warfare is unique, the mainstream of military thought and modeling should be developed apart from naval theory and strategy. If this is true, then navies should logically operate in mutual support of land forces, rather than as a part of a fully integrated force. Naval arms control would come under a special autonomous category rather than being an element of a comprehensive regime. The burden of explaining the rationale and requirements for the fleet, its operation and command, would fall clearly on the shoulders of naval officers and theorists, with a parallel burden placed upon land-oriented theorists and commanders to appreciate the uniqueness of naval operations.

On the other hand, if naval warfare is not truly unique, then both sides in this debate need to better understand how naval operations are to be integrated into a combined arms or joint doctrine for warfare. The naval component would have to be routinely factored in and not considered just an afterthought.

Naval proponents would have to become comfortable with the theoretical and doctrinal terms common to all services and articulate their contribution to the overall war effort in those terms. Naval arms control would not be separated into a discrete category but included in comprehensive proposals and agreements.

Having come to grips with whether or not there are essential differences between naval and land warfare, we must simultaneously factor in unique cultural, geo-political and politico-military aspects among nations if we are to ever properly analyze campaigns or to conduct net assessments. We cannot even begin to model Soviet and U.S./NATO maritime operations without recognizing the differences in socio-political and military-strategic culture matter that must be captured by the operations analyst.<sup>6</sup> Do we first address political-cultural differences and then deal with specific attributes of the different types of warfare, or attempt to handle military questions first, then apply the cultural differences?

Whereas everyone has had experience operating ashore and within his national culture, very few can bridge the gulf between cultures, and even fewer understand their own maritime operations, let alone those of other nations. It devolves then on the specialist who understands both to attempt to explain why these differences matter. This paper will primarily contrast Soviet (Red) behavior with U.S./NATO (Blue).

The most logical procedure seems to be a multi-tier consideration of maritime operations and naval warfare. First,

the environmental and geographic realities of life at sea should be considered along with international legal peculiarities. Second, the broad strategic principles of naval warfare should be contrasted with those oriented toward land warfare. Third, the operational and tactical levels of warfare should be analyzed to assess the differences between campaigns ashore and at sea. Finally, essential differences should be contrasted with an ultimate judgment whether models need to be different for war ashore and at sea, or for Red and Blue. Having considered these elements, we should be better equipped to conclude whether naval warfare is unique.

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## II

Among the most obvious reasons that nations need navies and other maritime assets is that 70% of the earth is covered by oceans and seas. One cannot use the seas without the hardware necessary to sail on, under, or over the oceans. When constructing that hardware, it is quickly evident that the oceans present environmental and geographic considerations, phenomena, and climate that challenge to life, let alone the full exploitation of military potential.

The hunter and the hunted at sea often do not operate in the same environment. The threat at sea must be considered from 360° of the compass and from above, on, or under the ocean as well as from space and the shore. Whereas ashore, battle lines and obvious lines of communications can usually be identified, the nature of war at sea defines areas of relative and temporary control. An ever-present guerrilla war at sea makes rear areas only somewhat safer than those ashore.

The size and opaqueness of the oceans led Western nations to hide the bulk of their strategic nuclear warheads at sea. Even if the carrier of strategic nuclear warheads is found, its identification, localization, and destruction are extremely difficult tasks. Lacking artificial and geographic constraints, naval warfare is often fought over extremely large spaces with large numbers of units that move with relative ease. The sea is considered a generally interconnected whole, so that war at sea between global powers, is automatically global war. To argue

that we can arbitrarily separate maritime theaters of combat is to speculate that when there is a war in Europe, enemy naval forces meeting in mid-Pacific will render passing honors.

Land warfare, with the exception of guerrilla warfare, is generally fought over territory, hence gaining land behind one's leading edge of troops, is a proper measure of effectiveness. Alternatively, land warfare can be considered fought for the right to administer laws and regulations over populations, hence numbers of controlled people or the neutralization/destruction of opponents are also proper measures of effectiveness. Political boundaries ashore are often, but not always, determined from the final battle lines.

Naval warfare is fought over communications; the ability to use the sea for one's own advantage and to deny that use to an enemy. The proper measures of effectiveness are the unhindered use of the seas and the attrition or neutralization of enemy forces capable of preventing that use. Destruction or neutralization of vital enemy assets is the major contribution of navies to the war effort rather than maintaining a presence at the forward edge of a battle area. There are exceptions, of course, where a naval presence can tie down land troops that would otherwise re-deploy.

Ocean areas cannot be permanently won or lost. An area of relative control can be vacated and need not be garrisoned unless navies are projecting power ashore. Political boundaries at sea are effected more by the political boundaries ashore than they

are by the final naval battle lines.

In addition to these above inherent differences, there are also man-made differences in the legal regimes. In war at sea, the private property of an enemy and, in certain circumstances, the private property of neutrals, is subject to confiscation by commanders of belligerent warships and aircraft. Generally, in land warfare private property is not supposed to be disturbed by contending military forces. Certain types of vessels and aircraft at sea may never be made the object of an attack. Examples include hospital ships and evacuation aircraft, vessels on religious, scientific, or philanthropic missions, small fishing vessels, and boats engaged in coastal trade.

The open ocean belongs to no one. Products from the sea, formerly belonged to no one until harvest. Today, there are special ownership rights accorded resources found on continental shelves and within exclusive economic zones. Ownership of products on the seabed of the high seas has yet to be resolved. Transit across, over, or under the high seas cannot be denied. This provides navies a special advantage, being able to travel without legal restriction over, on, or under most of the earth's surface.

With internationally accepted norms of transit or innocent passage through archipelagos, straits, and the territorial seas of other nations, maritime forces can generally reach the shores of another coastal nation without hindrance. This is recognized and appreciated by both major powers, who often engage in naval diplomacy, and the smaller coastal states which would like the

option of having a friendly show of force off their shores. The threat to naval forces increases with their closeness to those shorelines. With ever increasing importance accorded by a coastal state to waters near its own shores, maritime forces make major political statements by their presence in certain portions of the seas, by their continued presence, or timely withdrawal. A maritime presence by warships in another nation's exclusive economic zone, or waters claimed as historic, or even on innocent passage in territorial waters, presents other nations the opportunity for political action or escalation both laterally and over time without having to act vertically.

International conventions prohibit the use of certain types of mines and torpedoes, which have no real parallel in land or air warfare, although each form of warfare has its own special legal restrictions. At sea, torpedoes must become harmless should they miss their target. Anchored mines must similarly become harmless if they break free. Unanchored mines must become harmless within one hour of loss of control. In all cases of mine warfare at sea, international agreements require that precautions must be taken to grant security to peaceful shipping.

Although the above environmental, geographic, and legal factors have been cast in terms of "unique" properties associated with the sea, there are many parallels in non-maritime operations and warfare. For example, although it is more difficult to support life at sea than ashore, life support in the air or in space can be orders of magnitude greater. We have not yet begun

to appreciate the military potential of space due to these complexities.

A spherical threat at sea is seldom taken for granted by the individual surface or subsurface naval warrior, whereas in air and space warfare, it is obvious. The similarities between naval surface warfare and desert warfare have yet to be fully recognized. Although most naval warfare lacks a "forward edge" to the battle area, amphibious warfare does not. Blockade is a form of naval warfare, and forward maritime strategies designed to keep enemy navies bottled up in defensive bastions recognize the possibility of battle lines at sea.

The advantage of hiding strategic nuclear warheads at sea may diminish with the advent of mobile intercontinental range missiles. Indeed, the similarities with surveillance and targeting may make classic antisubmarine warfare theory applicable to campaigns fought against mobile missiles. One obvious difference will remain, however. Whereas a nation may find it politically easy to attack an enemy's nuclear assets hidden at sea during the conventional phase of a war, he may find it much more difficult to attack those same assets hidden on enemy territory.

Although naval forces may operate over large areas of the earth, air power has similar capabilities and is also capable of delivering tremendous firepower in even less time than can naval forces. The threat to virtually any force increases with its closeness to an opponent's home areas; this factor is not unique

to naval warfare and has been essentially negated by the advent of the intercontinental range missile.

War in space is even more automatically a global war due to the total absence of any geographic restrictions. Air and space forces also do not fight for territory but rather to use airspace and deny it to an enemy. Although the air immediately above national territory belongs to that nation, the space above that belongs to no one and passage through it cannot be denied.<sup>7</sup> Strategic nuclear war theory is very similar to naval warfare in that destruction of major assets is the proper measure of campaign effectiveness.

Environmental and geographic factors are most often used to testify to the unique nature of maritime operations and warfare, yet we see numerous parallels with desert and space warfare. The similarities between space warfare and war at sea are striking and increasing if one considers legal issues.

### III

Strategies for employing navies can be predicted by geographic realities such as island status, continental or maritime consciousness, types of terrain, etc. Similar geographic considerations also allow prediction of land warfare strategies. Geographic realities, for example, predict that navies alone could not defeat Nazi Germany or cannot defeat the Soviet Union today but that the failure to win at sea could cause NATO to lose a war.

Past naval strategies have vacillated between the indirect and the direct approach. Blockade, threats by fleets in being, as well as decisive battle against a main battle fleet are totally acceptable actions for naval operations in wartime. Land warfare strategies have perhaps paid more attention to decisive battles but successful strategists have utilized the full spectrum of options, including the indirect approach, to attain victory.

A frequently cited advantage of naval forces is the full spectrum of warfare they bring to the battle area. The modern carrier battle group is ready to engage in warfighting at virtually any point in the ocean or the adjacent coastline and against any enemy. Yet, despite the impressive force that a carrier battle group can bring to a coastal area, it is ill-suited to deal completely with common insurgencies and terrorism. There are still forms of warfare that require a man on the ground with a gun in his hands.

International maritime law and the laws of war make special and unique provisions for military operations on the high seas in time of peace, and armed conflict with unarmed and armed non-combatants and non-belligerents within the battle area. At sea, it is easier to identify non-combatants and to minimize collateral damage to them. These factors are not unique to naval warfare theory; only significantly less expensive to attain. The rights of non-belligerents in space are probably similar to those at sea.

Nations will fight their next major wars at sea with the navy that survives the first salvo. Major fleet units must be already built, trained, and outfitted without need for last minute supplies or personnel. Replacement ships may never be constructed before a future war ends. Lesser demanding campaigns, of course, will continue to be able to rely on taking up civilian shipping and boats. A proper method of calculating the ever changing correlation of forces in a major war is to also calculate the opportunity cost of the loss of assets irreplaceable during the remainder of the war.

A modern armored division cannot be created overnight either. It is also unlikely that strategic nuclear delivery vehicles or significant numbers of airplanes will be built during a future war to supplant attrition. U.S. strategic nuclear force programming strategies and declaratory employment policies are based upon forces surviving a well-executed Soviet first strike. A modern major war between the superpowers will also be conducted



with the armed forces that survive the first salvo and existing, already trained, and equipped reserves.

Whereas concepts for the operational level of warfare appear to be identical whether combat occurs on land or at sea, one can argue that some of those concepts seem to matter more, or assume special characteristics, if one is at sea.<sup>8</sup> For example, it appears that massing (concentration of fire) is a prerequisite for a successful combat strike at sea against certain classes of well protected targets. If true, this could mean that a Soviet naval commander's calculations might demonstrate the need for attack with nuclear weapons, considering the survival potential of an enemy ship to conventional attack. Unlike in land warfare, however, massing occurs at sea when assets widely dispersed for defense are temporarily concentrated to execute a strike or conduct a battle.

With so much of the earth covered with water, maritime warfare is pursued primarily where the surface provides few opportunities for concealment. Hence, deception is more difficult to achieve. Surprise and deception are vital components of Soviet military art but appear to be even more important at sea: if surprise is successful at sea, then perhaps operational or even strategic objectives can be met in the early stages of a war.

In undersea warfare, the naval tactician and operational planner must consider the terrain of his battlefield like his land-oriented counterpart. Contemporary trends in undersea

warfare may invite the naval tactician to study land warfare in much greater detail than in the past.

Clausewitz argued, successfully, that the defense is the stronger form of warfare ashore. We are comfortable with heuristics in land warfare like a favorable 3:1 offense/defense combat capability force ratio to overcome prepared defenses. Naval operations seem to require only 4:3 for conclusive engagements and a 3:2 advantage to crush an enemy<sup>9</sup> with the American victory at Midway being a case of winning with an inferior force. Success in close-in defense may require a 1:1<sup>10</sup> offense/defense force ratio. In certain normal defensive naval operations, such as protection in sealines of communication, the operation should be subjected to rigorous testing which would help illuminate the differences in land and sea warfare. It appears that the offense is the stronger form of warfare at sea.

Attacks by a weaker force and attacks as an integral element of defense, have a long tradition in the sea services. The attacker in land warfare attempts to pit his strength against enemy weakness. At sea, the attacker must eventually attack the enemy's strongest targets to succeed in battle, although obviously in a manner that minimizes the threat.

History records that in land warfare, strategic reserves are a vital necessity; with the epitome of generalship being, in part, demonstrated by committing the reserves at the vital place and at the crucial time. Reserves are rarely used this way in naval warfare, it being more important to mass for a decisive

battle. Thus, attrition in key battles rather than combat over extended periods, is an essential element of naval warfare. Campaigns fought over the sealines of communications are a significant exception.

Modern naval, air, and space warfare will all likely be short bursts of concentrated combat instead of prolonged and continuous engagements, conducted in a target-poor environment. In a strategic defense environment, if defenses are to be overcome, massing may become as important to strategic nuclear warfare as it now is to naval warfare.

Yet maneuver is also an essential ingredient of naval warfare. The extended mobility of fleets enables them to change instantaneously from the defensive to the offensive without warning. This is also true of air and space warfare and can be true of land warfare. Maneuver warfare to a seaman, however, is generally considered in relative, not geographic terms.

The size of the battle area in land warfare is normally smaller than in naval warfare and is frequently fixed by geographic constraints or political boundaries. Although this could occur in battles proximate to land, it is also possible to fight in the open sea in a battle space that depends entirely upon the area selected by the commander to dispose his forces. Thus, a general principle of Soviet military art--simultaneous pressure on the enemy to the full depth of his operationally deployed area--takes on a different meaning at sea since the

spatial scope of the battle area is less likely to be predictable.

Navies, as presently constructed, cannot fight and win nuclear wars at sea, a frequently cited criticism of modern navies. Armies likewise cannot fight and win against nuclear enemy to not use his nuclear forces against both armies and navies. Extended nuclear deterrence, therefore, extends not over allied nations, but also over our fleets at sea.

Although nuclear warfare at sea is easily contemplated by land-oriented theorists (lack of collateral damage and the holes fill in), it is no more the preferred option for U.S. naval commanders than nuclear war is preferred by ground forces commanders. U.S. declaratory strategy has been to not allow a nuclear war to be limited to the maritime region.<sup>11</sup> The advantages of higher probabilities of kill in nuclear war at sea are offset by environmental damage, loss of control, and predictability in battle management due to the increased "fog of war." Certainly, nuclear war in space will reflect many of the same advantages and disadvantages as nuclear war at sea. If one were to argue that a nuclear war could be confined to one sphere, it would more likely be space and not the sea.

Although not necessarily unique, it is probably more likely that naval forces of the superpowers will have onboard both nuclear and conventional weapons during the conventional phase of a war. Hence when contemplating actions during the conventional phase, each side must account for the ever changing nuclear

correlation of forces, as unused weapons are lost to combat  
actions against weapons carrier.<sup>12</sup>

Maritime forces are often at a serious disadvantage at sea by their inability to determine hostile intent in time to provide an effective defense. Modern warships in the Persian Gulf have the sensors to help determine the identify of an unknown target but even when the identify is known, still might not be able to determine whether that target is going to attack in sufficient time to mount a defense. One might argue that this situation holds in all other forms of warfare, but the consequences of the loss of an aircraft carrier today or a battleship in the past are significantly different than the loss of an army brigade or a few aircraft.

Furthermore, not all maritime forces are capable of either identifying an unknown target or even knowing that hostile enemy targets are in the vicinity. Examples of this would be Marines transiting on amphibious ships, Army troops or equipment given passage on ships taken from the merchant marine, or Air Force equipment on a pre-positioned depot ship. None of these ships would likely have any onboard antisubmarine warfare equipment and, if operating alone, might have the first indication of hostile intent when a torpedo struck home.

Major warships also have difficulties determining hostile intent. Ships attempting to hide by operating under emissions control will not be able to use their full suite of active sensors. Some nations do not yet have sea-based airborne early

warning aircraft to assist in battle group defense. The sounds of diesel-electric submarine on batteries may be so slight or general to preclude either identification or classification.

Problems in resolving hostile intent are not unique to naval warfare but the consequences of the inability to do so put this factor into a genuine special category. The more we reduce the number of aim points, as we have done in the numbers of aircraft carriers and strategic nuclear submarines, the more we must study this issue and generate creative rules of engagement. The loss of even one OHIO class submarine, lets an enemy achieve a significant strategic objective of reducing our ability to threaten or strike his homeland by almost two hundred nuclear warheads.<sup>13</sup>

There are numerous other claims to the uniqueness of naval warfare and maritime operations,<sup>14</sup> but on inspection most of these actually have parallels in other forms of warfare. Such claims include the close interaction between forces in peacetime, the difficulty in surveillance and targeting, unique maritime organizations such as antisubmarine and hydrographic/navigation units, short tactical logistics tails, contested logistics lines, inability to replenish during combat, and the inability to model the complex interactions of air, surface, and subsurface warfare which characterize carrier battle group operations. Each of these has parallels in other forms of warfare but, in all cases, there are specific factors that require consideration because the operation takes place on above, or under the sea.

#### IV

The evidence thus far is mixed at best. Despite objective evidence and the ability to apparently argue the case for or against the "uniqueness" or "difference" of naval warfare, most defense and military specialists, in and out of uniform, deem that maritime affairs, naval operations, naval warfare, or people in the naval service are outside the mainstream of military consciousness. Consider the following remarks in the private war journals of Colonel General Franz Halder in June 1942, when all was not going well on the Eastern front:

"The Naval Operations Staff's picture of the war situation strays far from our sober view of facts. Those people are dreaming in terms of continents. Having watched the Army's performance to date, they assume without another thought that it all just depends on what we like to do and when... They are glibly talking about land operations through Italian Africa to the East Africa Coast and South Africa. The problems of the Atlantic are treated with off-hand superiority and those of the Black Sea with criminal unconcern.<sup>15</sup>

More recently, there has been an interesting analysis of why more Navy and Marine Corps officers entertain doubts about the value of nuclear weapons than their colleagues in other services.<sup>16</sup> It is not clear that the sample for this study that drew this conclusion was scientific; however, it is not the first time this comment has surfaced.

The RAND Corporation Arroyo Center recently published a monograph for the U.S. Army that explores the alleged cultural biases of the individual military services.<sup>17</sup> The U.S. Army is described as having "its roots in the citizenry...service to the nation, and...utter devotion to the nation...taken greater pride

in the basic skills of soldiering than in their equipment...the most secure of the three services...aimed at getting a single answer (often a number) rather than illuminating the alternatives in the face of recognized uncertainties...not shown any particular strong affinity for strategy...unique among the services in its acceptance of national strategies in peacetime which it is both utterly committed to execute and unlikely to be able to successfully prosecute in wartime." "What is the Army? It is first and foremost, the nation's obedient and loyal military servant. "

The U.S. Air Force is "said to worship at the altar of technology...by far the most attached of the services to toys...always the most sensitive to defending or guarding its legitimacy as an independent institution...supremely confident about its relevance...the most comfortable of the three services with analysis...the most comfortable with strategy and things strategic...but not irrevocably committed to their execution in war." "Who is the Air Force? It is the keeper and wielder of the decisive instruments of war."

The Navy is characterized as being "far less toy oriented...more likely to associate themselves with the Navy as an institution...the hypochondriac of the services, constantly taking its own temperature or pulse, finding it inadequate, caught up in an anxiety largely of its own making...supremely confident of its legitimacy as an independent institution, but with the advent of long-range aviation, and again with nuclear weapons, its relevancy has come into question...has little



tolerance of analysis for planning or evaluating the Navy...may advocate strategies in peacetime to their advantage, but they are not irrevocably committed to their execution in war." "Who is the Navy? It is the supra-national institution that has inherited the British Navy's throne to naval supremacy."

Are these comments germane to an objective analysis of the differences, or degree of uniqueness of naval and other types of warfare, or are they merely anecdotes of interest to would-be reformers and interesting copy for public consumption?<sup>18</sup> To me, despite objective evidence to the contrary, there is an overwhelming perception that naval warfare is very "different." These differences in perception must be reflected by the model builder. Where the actual processes of combat do not contain different dynamics that are in-fact different, then the model of combat need not be different.

There is more substance to these perceptual differences than might initially meet the eye. For example, the Navy takes it for granted that naval warfare is so unique due to geographic realities that there are differences in "doctrine" between the Atlantic and Pacific fleets. Until recently, there were differences in "doctrine" between the air, surface, and sub-surface forces. The Air Force accepts that there are differences in "doctrine" between branches of their service (but that only one of these branches has a major role in deciding the issues). The Army takes it for granted that there can only be one doctrine for the conduct of all warfare.

In nuclear wargames, there are significant differences in how Red and Blue navies ought to be played. For example, in a model we can probably represent the correct level of nuclear warheads on patrol by having the Red Navy deploy its strategic nuclear submarines in the deep ocean rather than in bastions. Similarly in a model we could probably have the Red Navy achieve the correct damage expected on attacks against carrier battle groups by accounting for attacks by air-breathing units only instead of in coordination with submarines.

Both these portrayals of Red would be absolutely incorrect, since the models would no longer attempt to capture reality and force players to deal with the problem expected. At all levels of warfare, it is extremely important to accurately represent combat if a purpose of the game or simulation is to test strategies, operations, or tactics or to train strategists, campaign planners, or tacticians.

If naval warfare is perceived different and should be handled as a special case, then naval warfare ought to be handled in this manner. To not do so risks having naval commanders reject models without considering the substance. Modelers may have to approach the truth of the issue when it comes to minimizing computer code and the like. The modeler certainly must know whether or not generic attrition models apply equally to land and sea warfare, or to both Red and Blue. Perhaps the best answer to the question posed by the title of this essay is that naval warfare can be fought not only from ships at sea but also from space and in certain types of "land" warfare.

An argument that naval warfare is different is not an argument that it is necessarily more important than other forms of warfare. One of the major benefits of reading Alfred Thayer Mahan is to learn that the French Navy was defeated, in part, due to France's attempt to operate the fleet as an adjunct of the Army, and by officers who either did not understand the sea or had their primary experience in the merchant service.<sup>19</sup> Without free use of the seas, the French nation could not achieve the political, economic, and military objectives on land that it set for itself. Considering the importance of naval warfare to France leads the analyst to conclude that the impact of naval warfare often takes an extended period to take effect, but when it does,<sup>20</sup> its effect is strategic.

Naval warfare may not actually be "unique" and there may be no objective reason why land-oriented generals cannot command fleets; indeed one can point to the successful amphibious campaigns that were directed during World War II by Generals Dwight Eisenhower and Douglas MacArthur. If, however those generals do not feel that they have the capability for maritime command, if the sailors of the fleet lack confidence in their commanders regarding the special knowledge to inspire their best performance, then perhaps we had best leave command of the fleet to seamen.

Over the years, naval power has allowed what would have otherwise been minor political actors to make major global political gains. It does not take a great investment for any coastal state to initially become a local naval power. If there

is a significant choke point in the region, a minor political power can exert substantial local maritime and political influence. Only the most developed nations can perform sophisticated maritime missions such as deep submergence, exploitation of the deep seas, and distant power projection.

Navies, like other military services, normally operate outside the public consciousness. The subtle, slow, and indirect influence of naval warfare helps to shelter maritime affairs from most public consciousness. In a democracy, the public will ultimately decide how much it is willing to invest in government and defense. Navies are often out of sight and out of mind, so that the public rarely understands the extent and value of sea power and even more rarely is willing to provide the support it deserves. Happily, this nation has a consciousness that tends to support a substantial navy (but only to maintain a relatively modest army). The United States thinks and acts like a maritime nation. The Soviet Union does not. Gaming and politico-military simulations must capture that difference.

Sea power is not an end in itself. Its value lies in the ability to protect commerce, project power ashore or to take actions for political gain. The objectives of war apply to warfare at sea. We cannot afford to have one set of concepts and theories for warfare and armed conflict and a separate set for employment at sea. The different cultural differences between warfare at sea and warfare ashore, however, do matter in the same way that strategic culture between nations matters. Naval warfare may not be "unique" any more than land warfare is

different than aerial combat but the differences are significant enough to require special consideration.

## NOTES

1. Sea Power: A Naval History, E.B. Potter, Ed., Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1960, pp. 788-789. The padding was actually written by a watch officer and not Admiral Nimitz. Nimitz' actual words were, "Where is, repeat where is, Task Force 34?"

2. Robert Komer's comments on the subject are thought provoking and should be continuously addressed by naval officers: "Even if all Soviet home and overseas naval bases were put out of action, and Soviet naval and merchant vessels swept from the high seas, this would not suffice to prevent Moscow from seizing or dominating the rimlands of Eurasia...and cutting off their economic lifeblood...Even if we simultaneously swept the Soviets from all the seven seas at the outbreak of a war, this could not alone prevent the U.S.S.R. from dominating the entire Eurasian landmass..." See his Maritime Strategy or Coalition Defense?, Cambridge, MA: Abt Books, 1984, pp. 67 and 74. These comments reflect Komer's belief that the Navy was developing strategies and capabilities that could not contribute to the overall political goals desired.

3. See my "Soviet Naval Strategy?" Naval Forces, Vol. VIII, No. 17/1987, pp. 56-60. What makes Soviet military strategy and its naval component even more interesting is that many of the principles of land warfare were developed following the 1917 Civil War and during battles in defense of Leningrad. Russian terrain in this area does not lend itself to general concepts of land warfare and one could argue that Soviet military strategy for armed conflict on their own soil is more like naval warfare than armed conflict ashore elsewhere. I am indebted to Chris Donnelly for this point.

4. James Tritten and Roger Barnett, "Are Naval Operations Unique?" Naval Forces, Vol. VII, No. V/1986, pp. 20-30.

5. See for example Admiral P. Navoytsev, First Deputy Chief of the Main Navy Staff, "Regularities, Content and Characteristic Features of Modern Naval Operations," Morskoy Sbornik, No. 7, 1986, pp. 18-23. "The regularities of conducting combat actions at sea are dictated by general laws of warfare and by features of the conduct of combat actions at sea...which are predetermined by capabilities of naval arms, methods of their employment, and the medium of struggle" (pp. 18-19).

6. LCDR Kenneth R. McGruther, USN, The Evolving Soviet Navy, Newport, R.I.: Naval War College Press, 1978, pp. 1-8 argues that the leadership of the Soviet Navy shares a professional self-image shared by most naval officers of most navies.

7. The exact boundary between national airspace and space has not yet been settled by international law.

8. The operational level of warfare has been treated differently by the two superpowers. The Soviet Union and Soviet Navy follows the German lead in breaking war down into three levels; strategic, operational, and tactical. The U.S. Navy does not use this concept of a separate operational level of warfare nor the term "operational art." For some pioneering work on "naval operational art," see Dr. R.H.S. Stolfi, Soviet Naval Operational Art, NPS-56-88-015, Monterey, CA: Naval Postgraduate School technical report (forthcoming), and LT David J. Kern, USN, Soviet Naval Operational Art, Master's Thesis, Monterey, CA: Naval Postgraduate School, 9 June 1988, 122 pp.

9. CAPT Wayne Hughes, USN (Ret.), Fleet Tactics: Theory and Practice, Annapolis, MD: Naval Institute Press, 1986, p. 179.

10. I am indebted to Colin Gray for this point which he will argue in his forthcoming Wartime Influence of Seapower on Land War.

11. "...our policy objective of denying the Soviets the ability to limit a nuclear war to the sea," Caspar W. Weinberger, Annual Report to the Congress, Fiscal Year 1984, Washington, D.C.: U.S. Government Printing Office, 1983, p. 235.

12. See my "(Non) Nuclear Warfare," U.S. Naval Institute Proceedings, Vol. 113, No. 2, February 1987, pp. 64-70.

13. See my Soviet Naval Forces and Nuclear Warfare: Weapons, Employment, and Policy, Boulder, Colorado: Westview Press, June 1986, pp. 53-68, 209-210.

14. L.J. Low and E.L. Dubois, "Contrasts in the Modeling and simulation of Naval and Land Combat," in L.G. Callahan, Jr., Ed., Proceedings of the Workshop On: Modeling and Simulation of Land Combat, Georgia Tech. Research Institute, 1983, pp. 88-118.

15. The Halder Diaries: The Private War Journals of Colonel General Franz Halder, reprinted from the translation prepared by the Office of the Chief of Counsel for War Crimes, Office of Military Government, United States, 1948, Boulder, CO: Westview Press, 1976, p. 325 (emphasis added).

16. Jerome D. Frank and John Rivard, "Antinuclear Admirals - An Interview Study," Political Psychology, Vol. 7, No. 1, 1986, pp. 23-52.

17. Carl H. Builder, The Army in the Strategic Planning Process: Who Shall Bell the Cat?, R-3513-A, Santa Monica, CA: The RAND Corporation, Arroyo Center - Prepared for the U.S. Army, April 1987.

18. An example of interesting reading in Arthur T. Hadley's "The Split Military Psyche," The New York Times Magazine, July 13, 1986, pp. 26-33; or his The Straw Giant: Triumph and Failure: Americas Armed Forces, New York: Random House, 1986, pp. 67-73.

19. RADM Alfred Thayer Mahan, USN, The Influence of Sea Power Upon the French Revolution and Empire 1793-1812, New York: Greenwood Press, 1968 reprint, Vol. I, pp. 35-68 and 173-183, and Vol. II, pp. 27 and 391-392.

20. Colin S. Gray, The Wartime Influence of Sea Power Upon Land Power, Final Report to the Chief of Naval Operations (OP-00K10), Fairfax, VA: National Security Research, March 1987, pp. 3, 479.



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